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(54) Title: **ACTIVE AND ADAPTIVE PHOTOCROMIC FIBERS, TEXTILES AND MEMBRANES**

(57) Abstract: A process to make a dyed fiber which has the steps of mixing a dye capable of changing color and a polymer into a solution at a temperature below the temperature at which the dye or polymer degrades to form a polymer dye solution and electrospinning said polymer dye solution to form a fiber wherein the dye penetrates more than the surface of the fiber. The invention also relates to the fiber and use of the fiber.

WO 2005/090654 A1